

Chemical Industrial Safety and Environmental Considerations

James Stewart

Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA, 30144

Workplace safety, particularly in the chemical manufacturing and treatment industries, is always at the core of any competent business strategy of any modern industrially- or manufacturing-focused company. Due to the inherent and sometimes readily apparent nature of chemical hazards, safety in these industries has been, by necessity, a practical consideration since their inception. However, only relatively recently has it developed into a significant philosophical focus of businesses, regulatory agencies such as OSHA, and associated non-regulatory bodies such as the U.S. Chemical Safety Board (CSB). Organizations like OSHA and the CSB guide policies to help shape the culture of safety in businesses and in academia where chemical hazards are a concern. In particular, the CSB investigates and provides objective examinations of industrial accidents which involve loss of life or substantial, unintentional hazardous chemical release. They can then offer suggestions as to how these incidents could have been prevented and how policy can be developed to minimize the chances of future incidents from either occurring at all, or causing injuries and fatalities if they do. Here, select incidents investigated by the CSB in the year 2019 and the determinations resulting from that investigation are examined to obtain insights into modern industrial safety policies and culture as well as promote awareness of these incidents.